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ABSTRACT

Equal Career Opportunities is a program that aims to provide instruction in English language skills while offering bilingual instruction in basic skills and pre-occupational training to limited-English-proficient Spanish-speaking and Haitian high school students at three schools in New York City. This report describes the program as it was implemented in 1980-81. The report discusses the program settings, participant characteristics, philosophy and organization, student placement, instructional offerings, career orientation and supportive services, curriculum development, staff development, program implementation, and program evaluation in each of the three sites. Evaluation results indicate that: (1) variable gains were achieved in mastery of English syntax objectives; (2) in most cases, the passing rate in mathematics, social studies, and native language arts met the program's criterion objective; (3) improvement in attitudes toward school surpassed the criterion objective in all three schools; and (4) program attendance was significantly higher than school-wide attendance. It is suggested that the program has had positive outcomes but that the curriculum development aspect needs to be strengthened. (Author/MJL)

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FINAL EVALUATION REPORT

E.S.E.A TITLE VII

Grant Number: G007905248

Project Number: 5001-56-17613

# PROJECT ECO:

# EQUAL CAREER OPPORTUNITIES

# FOR BILINGUAL HIGH SCHOOL STUDENTS

1980-1981

Director:
Mr. Angelo Gatto

Prepared by the
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TABLE OF CONTENTS


| | PAGE |
|---|---|
| INTRODUCTION | 1 |
| I. Context | 3 |
| Overview | 3 |
| Site Variation | 4 |
| II. Student Characteristics | 7 |
| Overview | 7 |
| Variation of Student Characteristics | 12 |
| III. Program Description | 13 |
| Philosophy | 13 |
| History | 13 |
| Structure | 14 |
| Articulation | 16 |
| IV. Instructional Component | 17 |
| Overview | 17 |
| Student Placement and Programming | 17 |
| Mainstreaming | 17 |
| Variation by Site | 18 |
| V. Non-Instructional Component | 24 |
| Career Orientation | 24 |
| Supportive Services | 24 |
| Staff Development | 25 |
| Staff Characteristics | 25 |
| Curriculum Development | 27 |
| Parental Involvement | 28 |
| Affective Domain | 28 |
| VI. Findings | 31 |
| Assessment Procedures, Instruments, and Findings | 31 |
| VII. Conclusions and Recommendations | 65 |

LIST OF TABLES


| | | PAGE |
|---|---|---|
| Table 1. | Program sites. | 2 |
| Table 2. | Overview of bilingual services. | 3 |
| Table 3. | Number of program students by school, language, and country of birth. | 8 |
| Table 4. | Number and percentages of students by sex and grade for the entire program. | 9 |
| Table 5. | Number and percentages of students by sex and school. | 9 |
| Table 6. | Number of program students by age and grade. | 11 |
| Table 7. | Title VII-funded staff positions by school site. | 15 |
| Table 8. | English as a second language instruction. | 21 |
| Table 9. | Native language instruction. | 22 |
| Table 10. | Content-area instruction. | 23 |
| Table 11. | Staff characteristics. | 26 |
| Table 12. | Post-high school plans of twelfth-grade students. | 30 |
| Table 13. | Results of the Criterion Referenced English Syntax Test (E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, fall). | 34 |
| Table 14. | Performance of students tested on the Criterion Referenced English Syntax Test (E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, fall). | 35 |
| Table 15. | Results of the Criterion Referenced English Syntax Test (E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, spring). | 36 |
| Table 16. | Performance of students tested on the Criterion Referenced English Syntax Test (E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, spring). | 37 |
| Table 17. | Results of the Criterion Referenced English Syntax Test (E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, fall). | 38 |

LIST OF TABLES
(continued)


| | | PAGE |
|---|---|---|
| Table 18. | Performance of students tested on the Criterion Referenced English Syntax Test (E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, fall). | 39 |
| Table 19. | Results of the Criterion Referenced English Syntax Test (E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, spring). | 40 |
| Table 20. | Performance of students tested on the Criterion Referenced English Syntax Test (E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, spring). | 41 |
| Table 21. | Number and percent of French/Creole-speaking students passing teacher-made examinations in English as a second language at Samuel J. Tilden High School. | 42 |
| Table 22. | Number and percent of Spanish-speaking students passing teacher-made examinations in mathematics at John F. Kennedy High School. | 43 |
| Table 23. | Number and percent of French/Creole-speaking students passing teacher-made examinations in mathematics at Andrew Jackson High School. | 44 |
| Table 24. | Number and percent of French/Creole-speaking students passing teacher-made examinations in mathematics at Samuel J. Tilden High School. | 45 |
| Table 25. | Number and percent of Spanish-speaking students passing teacher-made examinations in science at John F. Kennedy High School. | 46 |
| Table 26. | Number and percent of French/Creole-speaking students passing teacher-made examinations in science at Andrew Jackson High School. | 47 |
| Table 27. | Number and percent of French/Creole-speaking students passing teacher-made examinations in science at Samuel J. Tilden High School. | 48 |
| Table 28. | Number and percent of Spanish-speaking students passing teacher-made examinations in social studies at John F. Kennedy High School. | 49 |

LIST OF TABLES
(continued)


| | | PAGE |
|---|---|---|
| Table 29. | Number and percent of French/Creole-speaking students passing teacher-made examinations in social studies at Andrew Jackson High School. | 50 |
| Table 30. | Number and percent of French/Creole-speaking students passing teacher-made examinations in social studies at Samuel J. Tilden High School. | 51 |
| Table 31. | Number and percent of Spanish-speaking students passing teacher-made examinations in native language arts at John F. Kennedy High School. | 52 |
| Table 32. | Number and percent of French/Creole-speaking students passing teacher-made examinations in native language arts at Andrew Jackson High School. | 53 |
| Table 33. | Number and percent of French/Creole-speaking students passing teacher-made examinations in native language arts at Samuel J. Tilden High School. | 54 |
| Table 34. | Number and percent of Spanish-speaking students improving on the program-developed scale of attitude towards cultural heritage at John F. Kennedy High School. | 55 |
| Table 35. | Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards cultural heritage at Andrew Jackson High School. | 56 |
| Table 36. | Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards cultural heritage at Samuel J. Tilden High School. | 57 |
| Table 37. | Number and percent of Spanish-speaking students improving on the program-developed scale of attitude towards education at John F. Kennedy High School. | 58 |
| Table 38. | Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards education at Andrew Jackson High School. | 59 |
| Table 39. | Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards education at Samuel J. Tilden High School. | 60 |

LIST OF TABLES
(continued)


| | | PAGE |
|---|---|---|
| Table 40. | Staff awareness of students' problems and needs. | 61 |
| Table 41. | Significance of the difference between attendance percentages of program students at John F. Kennedy High School and the attendance percentage of the school. | 62 |
| Table 42. | Significance of the difference between attendance percentages of program students at Andrew Jackson High School and the attendance percentage of the school. | 63 |
| Table 43. | Significance of the difference between attendance percentages of program students at Samuel J. Tilden High School and the attendance percentage of the school. | 64 |

# PROJECT EQUAL CAREER OPPORTUNITIES (ECO)

| | |
|---|---|
| Central office location: | 442 East Houston Street,<br>New York, New York |
| Sites: | John F. Kennedy High School<br>Bronx, New York |
| | Andrew Jackson High School<br>Queens, New York |
| | Samuel J. Tilden High School<br>Brooklyn, New York |
| Year of operation: | 1980-1981, second year of funding |
| Languages: | Spanish, French/Creole |
| Number of participants: | 345 |
| Project director: | Angelo Gatto |

## INTRODUCTION

Equal Career Opportunities (ECO) in 1980-81 completed its two-year funding cycle. ECO's proposal called for a three-year program which would provide services to five schools. However, in the context of severe cutbacks in funding, it was urged during negotiations with Washington that the program operate only at the two sites serving Haitian students. Due to the acute need of Spanish-dominant students at John F. Kennedy High School, it was concluded that the program's budget could sustain the instructional and support services required to function effectively at three sites. The program was funded for two, rather than three years.

The following table outlines the program's operation at the three high schools:

Table 1. Program sites.

| SCHOOLS | TARGET LANGUAGE | NO. OF STUDENTS |
|---|---|---|
| John F. Kennedy H.S. | Spanish | 150 |
| Andrew Jackson H.S. | French/Creole | 100* |
| Samuel J. Tilden H.S. | French/Creole | 150 |

*This was the number specified in the proposal. In fact, 45 students were served.

When initially implemented in October, 1979, the program was coordinated from a central office on Pacific Street in Brooklyn. In order to consolidate ECO with other funded programs, the office was moved to Houston Street in Manhattan.

The project's primary aim has been to provide effective instruction in English language skills while offering bilingual instruction in basic skills and pre-occupational training to 350 limited-English proficient ninth, tenth, and eleventh graders. The project is strongly career-oriented; the emphasis of career training was selected by the administrations of the individual schools prior to the introduction of ECO. The thrust at each site was:

| | |
|---|---|
| John F. Kennedy H.S. | Health careers |
| Andrew Jackson H.S. | Pre-law and law |
| Samuel J. Tilden H.S. | Business |

# I. CONTEXT

## OVERVIEW

The three high school sites are located in lower middle-class neighborhoods in three boroughs of the city. John F. Kennedy High School was selected primarily due to the density of its student population; Jackson and Tilden High Schools were chosen as prototypes of projects offering bilingual career education to Haitian youngsters. All three schools are fully equipped for both vocational and academic instruction. Table 2 presents an overview of bilingual services at the three sites.

Table 2. Overview of bilingual services.

| NAME OF SITE | J.F. KENNEDY | | | ANDREW JACKSON | | | SAMUEL J. TILDEN | | |
|---|---|---|---|---|---|---|---|---|---|
| Instructional Component | YES | NO | # STAFF | YES | NO | # STAFF | YES | NO | # STAFF |
| English as a Second Language | X | | 10 | X | | 1 | X | | 3 |
| Reading (English) | | X | | | X | | | X | |
| Native Language | X | | 5 | X | | 2 | X | | 2 |
| Bilingual Math | X | | 2 | | X | | X | | 1 |
| Bilingual Science | X | | 1 | | X | | X | | 1 |
| Bilingual Social Studies | X | | 2 | X | | 1 | X | | 1 |
| Other: Health | X | | 1 | | X | | | X | |
| Non-Instructional Component | YES | NO | # STAFF | YES | NO | # STAFF | YES | NO | # STAFF |
| Administration | X | | 1 | X | | 1 | | | 1 |
| Supportive Services | X | | 5 | X | | 2 | X | | 2 |
| Curriculum Development | X | | 1 | X | | 1 | | X | |
| Staff Development | X | | 1 | X | | 1 | X | | 1 |
| Parent/Community Involvement | X | | 1 | X | | 2 | X | | 2 |
| Other: Bilingual Grade Advisor | | X | | | X | | X | | 1 |

## SITE VARIATION

### John F. Kennedy High School

The student body of Kennedy High School, numbering 4,800, is approximately 42 percent Hispanic and 32 percent black American. The remaining students are Asian, American Indian, and "other."

A major problem of the school has been overcrowding, which became serious about two years ago when the population numbered close to four thousand. In October, 1980, that number increased to six thousand. At the time of the site visit, the figure quoted was 5,300 which reflects those who graduated, as well as "no shows" and truants. The figure 4,800 represents the students attending regularly in 1980-81.

In general, Kennedy students are not particularly mobile. However, within the program this has not been the case. Most program students come from the Dominican Republic and tend to travel often -- as often as several times each year -- between the native country and the United States. Assessment of students' academic progress has therefore been difficult. The net effect of this mobility has been to hamper the acquisition of English-language skills, and of learning in general.

According to Title I data, almost half of Kennedy students come from low-income families. Resources within the community which are available to program students include libraries, museums, and other services. Some of the students attended Lehman College for special classes on Saturdays.

### Andrew Jackson High School

The population at Andrew Jackson, some 2,700 students, is almost exclusively black, with relatively few Hispanic students completing the

total. The ethnic survey from which this conclusion is drawn does not distinguish between black American students and black students of other origins. Title I data indicates that 83 percent of Jackson students come from low-income homes.

In a building with a capacity of close to 3,200 students, the students are not overcrowded. Since the school is in fact under-utilized, several measures have been undertaken to bolster its enrollment. However, attrition continues to concern the school administration; it has affected students in the bilingual program, since the Haitian population at Jackson has decreased.

Conflicting conclusions were reached as to the number of Haitian students at Jackson eligible for bilingual services: the school survey reported that 45 students were eligible; a separate survey conducted by the bilingual staff and project director suggested that a total of 120 Haitian students required Title VII services. Their meeting with Haitian community representatives and the school's principal did not result in an expansion of the program's population.

The program staff maintained contact with community-based organizations such as Haitian-Americans United for Progress (H.A.U.P.) and church organizations.

Samuel J. Tilden High School

The school is located in a residential setting in a relatively stable community of tree-lined streets, with single-family as well as two- and three-family houses. The population of the bilingual program mirrored this stability.

The school population is predominantly black (70 percent) with a smaller percentage of Hispanics (10 percent). The remaining students include primarily white students with a few other ethnic groups completing the total.

## II. STUDENT CHARACTERISTICS

### OVERVIEW

Students were selected from the bilingual populations of the three schools according to the following criteria and procedures: all participating students scored below the twenty-first percentile on the English Language Assessment Battery (LAB); other tests, such as the New York City Reading Test and Basic Competency Test, other academic data, and professional staff judgment were taken into account in assessing the LAB score. At all sites, students were dominant in the target language of the individual program. All participating students were Title I-eligible. Haitian students in the program ranged from those who were recent arrivals in the U.S. to those who had been in the country for up to four years.

Table 3 presents a breakdown of bilingual program students for whom information was provided, by school, native language, and country of birth.

Table 3. Number of program students by school, language, and country of birth. (N = 265)

| SCHOOL | LANGUAGE | COUNTRY OF BIRTH | NUMBER | PERCENT |
|---|---|---|---|---|
| Tilden | French/Creole | Haiti | 88 | 61% |
| Jackson | French/Creole | Haiti | 74 | |
| J.F.K. | Spanish | Dominican Republic | 62 | 39% |
| | | Puerto Rico | 12 | |
| | | Cuba | 9 | |
| | | Peru | 7 | |
| | | Ecuador | 6 | |
| | | Spain | 2 | |
| | | Other Latin American country | 5 | |

- Sixty-one percent of the program students were born in Haiti.
- Thirty-nine percent of the program students are from Spanish-speaking countries.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. In many high schools, girls outnumber boys, as they do at all three program sites (58 percent to 42 percent overall). This disparity may be due to a number of factors which affect boys and girls differentially, including difficulties of travel to and from school, and peer and parental pressures to leave school for employment or marriage.

Table 4 presents the distribution of bilingual program students by grade and sex. Table 5 provides a breakdown of program students by school and sex.

Table 4. Number and percentages of students by sex and grade for the entire program. (N=259)

| GRADE | MALE N | percent of grade | FEMALE N | percent of grade | TOTAL N | column total: percent of all students |
|---|---|---|---|---|---|---|
| 9 | 16 | 47 | 18 | 53 | 34 | 13 |
| 10 | 47 | 52 | 44 | 48 | 91 | 35 |
| 11 | 29 | 32 | 62 | 68 | 91 | 35 |
| 12 | 16 | 37 | 27 | 63 | 43 | 17 |
| TOTAL | 108 | 42 | 151 | 58 | 259 | 100 |

.The percentage of students is lowest in the ninth grade (13 percent), rises in the tenth and eleventh grades (35 percent), and drops in the twelfth grade (17 percent).

.Overall, the percentage of female students (58 percent) is higher than the percentage of male students (42 percent).

Table 5. Number and percentages of students by sex and school. (N=259)

| SCHOOL | MALE N | Percent | FEMALE N | Percent | TOTAL N | percent of all students |
|---|---|---|---|---|---|---|
| Tilden | 33 | 39 | 54 | 61 | 87 | 34 |
| J.F.K. | 48 | 47 | 54 | 53 | 102 | 39 |
| Jackson | 27 | 39 | 43 | 61 | 70 | 27 |
| TOTAL | 108 | 42 | 151 | 58 | 259 | 100 |

.At all three program sites, the percentages of female students are higher than the percentages of male students.

Because so many of the Project ECO students are immigrants, their educational histories may vary considerably. Many have suffered interrupted schooling, or because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 6.

As Table 6 indicates, the fact that so many students are overage may have implications for interpreting student outcomes and setting standards for expected rates of growth. These are students who may have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire oral and literacy skills in English.

Table 6. Number of students by age and grade.* (N=254)

| AGE | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | TOTAL |
|---|---|---|---|---|---|
| 14 | 1 | 1 | | | 2 |
| 15 | 5 | 5 | | | 10 |
| 16 | 16 | 17 | 4 | 1 | 38 |
| 17 | 8 | 32 | 22 | 1 | 63 |
| 18 | 2 | 18 | 31 | 9 | 60 |
| 19 | 2 | 13 | 18 | 9 | 42 |
| 20 | 1 | 4 | 13 | 13 | 31 |
| 21 | | | 2 | 4 | 6 |
| 22 | | | | 2 | 2 |
| TOTAL | 35 | 90 | 90 | 39 | 254 |

*Shaded boxes indicate the expected age range for each grade.

| | | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 | TOTAL |
|---|---|---|---|---|---|---|
| Overage students for the entire program | # | 29 | 67 | 64 | 28 | 188 |
| | % | 83 | 74 | 71 | 72 | 74 |
| Overage program students at Tilden | # | 7 | 28 | 26 | 3 | 64 |
| | % | 87 | 74 | 70 | 100 | 74 |
| Overage program students at J.F.K. | # | 19 | 27 | 31 | - | 77 |
| | % | 83 | 77 | 69 | - | 75 |
| Overage program students at Jackson | # | 3 | 12 | 7 | 25 | 47 |
| | % | 75 | 75 | 87 | 69 | 73 |

.Seventy-four percent of the program students are overage for their grade.

.Overall, the highest percentage of program students occurs in the ninth grade (83 percent).

.The highest percentage of overage students occurs at J.F.K. High School (75 percent).

## VARIATION OF STUDENT CHARACTERISTICS

### John F. Kennedy High School

At Kennedy, most of the program students lived in the school's attendance area. Most were Dominicans; all were Spanish-dominant. There was a wide range of preparedness and proficiency in Spanish and other academic areas. This spectrum was reflected in the fact that the instructional program in 1980-81 offered six sections of native language instruction for those who have achieved literacy, and five sections for those who have not. The range in English-language proficiency was equally diversified.

### Andrew Jackson and Samuel J. Tilden High Schools

Program students at Andrew Jackson and Samuel J. Tilden High Schools were, for the most part, recently arrived from Haiti. Their range of skills and abilities, including literacy in the native language and proficiency in English, was broad. Students also varied in terms of years of formal schooling. The target populations at the two sites differed in terms of their attitudes toward program participation. Whereas at Jackson, students tended to view participation positively, some Tilden students looked disfavorably upon the program. They felt discriminated against in a program which, in their view, segregated them and placed them in what may appear to be remedial and "slow" classes.

## III. PROGRAM DESCRIPTION

### PHILOSOPHY

The staff of project ECO shared the view that rapid gains in English language proficiency are key to students' success in other areas as well. Consequently, the approach was transitional, and worked to supplement the schools' existing foreign languages departments. Students were encouraged to acquire practical skills which might motivate them to graduate, prepare them for a career, and/or help them in pursuring further education.

Implicit in the project's philosophy was the conviction that bilingual skills can serve students well when they enter the labor market. Its commitment to exposing students to the world of work distinguished this project, and informed its day-to-day work at its three sites. While the sites shared these basic commitments, they varied in terms of emphases, strengths, and problems.

The program at Kennedy, a school with a large Hispanic population, enjoyed the support of the administration and faculty. Jackson had a dedicated assistant principal overseeing the program, but suffered from a lack of bilingual staff and from insufficient administrative support. Tilden, with its large Haitian population, was hampered by staffing problems, as well as by insufficient administrative support which, in turn, engendered low student morale.

### HISTORY

Project ECO was, in 1980-81, in the second of its two-year funding period. The first year was largely spent planning and phasing in the program and hiring staff. Progress during that year was also hampered by the fact

that the funding cycle did not begin until after the beginning of the school year. During the second year of funding, staffing continued to pose a problem due to the mobility of staff members, particularly at Jackson.

John F. Kennedy and Andrew Jackson had not previously received funding for bilingual services; Samuel Tilden had for three years received monies for bilingual instruction under a different program.

STRUCTURE

Project ECO's operation at three sites, in three boroughs, was coordinated from a central office in Manhattan. The full-time staff at the central office included the project director, an assistant director, and a bilingual secretary.

The project director's responsibilities included: overall administration and supervision of the program; articulation with principals and assistant principals at individual sites; hiring staff, and providing orientation and staff training regarding job responsibilities; preparation of the budget; and preparation of the instructional aide payroll.

An assistant director aided the director in carrying out the tasks listed above. Field supervision was a major responsibility of the assistant director.

Organization at Individual Sites

Project ECO functioned at each site within the foreign languages department, which is under the direction of an assistant principal or department head. This individual served as the contact person between Project ECO and the school site.

At each site, the project funded curriculum specialists, family assistants, educational assistants, one grade advisor, and student aides. Table 3 indicates the program staff funded by Title VII at each of the schools.

Table 7. Title VII funded staff positions by school site.

| John F. Kennedy | Andrew Jackson | Samuel J. Tilden |
|---|---|---|
| 1 Curriculum Specialist | 1 Curriculum specialist | 1 Grade advisor |
| 1 Family assistant | 1 Family assistant | 1 Family assistant |
| | 1 Educational assistant | 1 Educational assistant |
| 4 Student aides | 4 Student aides | 2 Student aides |

Staff members at the two schools providing services to Haitian students noted a scarcity of bilingual French/Creole staff, which they ascribed not only to a lack of available and qualified personnel city-wide, but also to the fact that administrators at both sites have set other priorities.

Seven new staff members were hired at the two sites at the beginning of the school year, but none were qualified to provide bilingual services to Haitian students. An attempt was made to meet this need: an individual was hired, and was assumed to speak French/Creole on the basis of surname. The person, in fact, turned out to speak only French and was from British Grenada. While French/Creole-speaking teachers were needed in math and science at Jackson, other priorities at the school precluded the allocation of funds for bilingual instruction.

In addition to Title VII staff, each site had tax-levy staff members providing coordination, instructional, supportive, and other services to students of limited English proficiency.

ARTICULATION

The three sites basically operated independently of one another, although they shared materials and the services of some staff members. The project director and assistant director, working out of the central office, served all three sites.

The project director visited each school twice each month, and supervised staff-development activities. (See section on staff development.)

In general, differences in the target languages and career emphases, as well as the location of the sites in three different boroughs, limited interaction among the programs at the three schools.

The proposal anticipated that individual sites would interact with other supplementary programs, such as Shared Instruction, Executive Intership, After-School Occupational Skills, and various programs based at city colleges, to acquire additional technical assistance and instruction off-site. In practice, this interaction was practically non-existent. Some Kennedy bilingual students attended special classes at Lehman College on Saturdays. Otherwise, all instruction took place on-site, with occasional field trips to other places in the city.

## IV. INSTRUCTIONAL COMPONENT

### OVERVIEW

While the sites shared the project's basic commitments, their different target populations, administrative perspectives, and staffing patterns were reflected in the program's instructional component at each school. At all three sites, English as a second language was stressed.

### STUDENT PLACEMENT AND PROGRAMMING

Eligible students in the ninth, tenth, and eleventh grades were placed in the bilingual program on the basis of an evaluation which took into account LAB scores, other indicators of English language ability, performance in content areas, academic records, and age. Parents were sometimes requested to take part in the decision-making process.

Project ECO aimed to individualize instruction as much as possible since classes were often composed of students from heterogeneous backgrounds. All students were offered intensive E.S.L. as well as native language instruction.

### MAINSTREAMING

Participants were encouraged to become proficient in English as quickly as possible. The criteria on which mainstreaming decisions were based included LAB scores, teacher recommendations, and consultation with the school counselors and, where appropriate, with the grade advisor.

A student who was not eligible for mainstreaming but wanted to opt out of the program was requested to ask his/her parents to come to school to meet with members of the staff. Telephone calls and/or home visits served

as alternate means of discussing the situation with parents.

By the end of the first year, a quarter of the bilingual program students at Tilden were expected to be mainstreamed. Participating students at the school were apparently amenable to mainstreaming.

At Kennedy, mainstreamed students remained in bilingual homerooms. Teachers could therefore follow up on a particular student's academic performance at any time. Mainstreamed students at Kennedy and Jackson kept in close touch with bilingual staff and students.

VARIATION BY SITE

John F. Kennedy High School

At Kennedy, students were offered four levels of E.S.L. instruction, as well as content-area classes in Spanish. Instruction was given on a whole-class basis unless students' needs called for individualized teaching.

In the classes visited by the evaluator, teachers made use of materials which they themselves had developed, and which they considered more suitable for their students than the available commercial texts. However, the commercial materials were used to supplement and reinforce the lesson introduced in class.

Placement in E.S.L. classes hinged on students' test scores, performance in prerequisite E.S.L. course, and teacher or guidance counselor recommendation. The four levels of instruction included beginning, intermediate, advanced, and a transitional level in which writing skills were stressed.

One educational assistant was observed working with students in the transitional writing skills class. The role of the assistant was to work with students on an individual or small-group basis, as well as to research and prepare materials under the supervision of the teacher, as well as help the teacher with clerical and other duties.

In the classes observed, students interacted eagerly with teachers and seemed to be absorbed by the material. In one class in particular, students were highly responsive, interested, and respectful.

The assistant principal stated that the weakest aspect of the program's instructional component at Kennedy was math; she cited students' low scores on last year's competency test. She attributed this to the absence of a bilingual math teacher in the program's first year, and anticipated that students' performance in math would improve due to the hiring of a math teacher, a new course designed to prepare students for the math competency test, and a greater emphasis on peer tutoring. A peer tutoring group was organized, and met with bilingual students after school four times each week for two hours.

Andrew Jackson High School

Although the proposal specified a target population of 100 students, 45 participants were selected for the bilingual program at Andrew Jackson on the basis of a school survey. Few of these students scored above the tenth percentile on the LAB.

Participants received instruction in E.S.L., and took all content-area courses in English-language mainstream classes except bilingual social studies. A bilingual educational assistant was available to assist students

with problems in these classes. Since the target population was dispersed throughout the school, the assistant was requested to visit a given class on the basis of the number of French/Creole-dominant students enrolled, and the judgment of the teacher or bilingual staff. In the classroom, the assistant worked individually with each student to clarify statements or directions given by the teacher. At the teacher's request, one or more students may be pulled out of the class and given individualized instruction in a separate room. Most of the bilingual staff, including the curriculum specialist, spent some time assisting students in this way. Tutoring and additional assistance was also available to students after school.

During the 0 period, students attended a course which considered their native culture and helped them to bridge the gap between cultures. Attendance was excellent at this course.

Samuel J. Tilden High School

At Samuel Tilden, each bilingual student was offered an individualized program based on the student's grade level, test scores, and overall evaluation. Transition into the mainstream was based on LAB scores, teacher recommendations, and consultation with the grade advisor and guidance counselor. The assistant principal estimated that by the end of the 1980-81 school year, a quarter of the program's students would be mainstreamed.

In the classes observed by the evaluators, all communication was in English. Content-area subject matter was presented exclusively in English.

The tables on the following pages outline the instructional program at the three sites:

Table 8. English as a second language instruction.

| COURSE TITLE AND LEVEL | NUMBER OF CLASSES | AVERAGE CLASS REGISTER | CLASS PDS. PER WEEK | DESCRIPTION | CURRICULUM OR MATERIAL IN USE |
|---|---|---|---|---|---|
| J.F.K. | | | | | |
| E.S.L. level I | 5 | 25 | 10 | Beginning | LADO: Learning English as a second language |
| E.S.L. level II | 7 | 25 | 10 | Intermediate | LADO: Real Stories |
| E.S.L. level III | 7 | 25 | 10 | Advanced | LADO 5: Grade Exercise American English |
| E.S.L. Transitional | 10 | 25 | 5 | Transitional | Open ended stories; Word Power |
| TILDEN | | | | | |
| English 45 level I | 1 | 23 | 5 | English for foreign born | |
| English 45 level II | 1 | 23 | 5 | " | |
| English 85 | 1 | 25 | 5 | " | |
| Speech 45 | 1 | 35 | 5 | Oral Communication skills | Teacher-made |
| Speech 65 | 1 | 36 | 5 | " | " |
| JACKSON | | | | | |
| E.S.L. I | 1 | 14 | 10 | Beginning E.S.L. | Everyday English Books I and II |
| E.S.L. II | 1 | 12 | 10 | Intermediate E.S.L. | Everyday English Books III and IV |
| E.S.L. III | 1 | 10 | 5 | Advanced E.S.L. | Light in the Forest |

Table 9. Native language instruction.

| COURSE TITLE | NUMBER OF CLASSES | AVERAGE CLASS REGISTER | CLASS PDS. PER WEEK | DESCRIPTION | CURRICULUM OR MATERIAL IN USE |
|---|---|---|---|---|---|
| J.F.K. | | | | | |
| Native lang. arts | 5 | 30 | 5 | Intermediate | Cuentos simpáticos Segundo libro |
| Native lang. arts | 6 | 30 | 5 | Advanced | Calidoscopio español Tercer Libro |
| TILDEN | | | | | |
| French 45 | 1 | 31 | 5 | Grammar and reading | Dialogue Grammatical Contes Populaires |
| French 85 | 1 | 40 | 5 | Literature - French | Poesie Du Monde Noir |
| JACKSON | | | | | |
| French | 1 | 25 | 5 | Advanced French grammar | Teacher-made |
| Afro-Haitian Literature | 1 | 12 | 5 | Literature of Haiti, Africa and the U.S. | Poesie Du Monde Noir, Voix Francaise du Monde Noir |

Table 10. Content-area instruction.

| SITE | COURSE TITLE | NUMBER OF CLASSES | AVERAGE REGISTER | LANGUAGE(s) OF INSTRUCTION | USED FOR WHAT PERCENT OF CLASS TIME |
|---|---|---|---|---|---|
| J.F.K. | Fundamental Math | 4 | 35 | Spanish | 100% |
| | Algebra | 2 | 35 | " | " |
| | Geometry | 2 | 35 | " | " |
| | R.C.T. Prep | 2 | 35 | " | " |
| | General science | 1 | 35 | " | " |
| | Biology | 2 | | " | " |
| | Eastern Civ. | 3 | 35 | " | " |
| | Western Civ. | 4 | 35 | " | " |
| | American studies | 2 | 35 | " | " |
| | Health | 1 | 35 | " | " |
| TILDEN | General math 45 | 1 | 42 | French/English | 75/25 |
| | General math 65 | 1 | 24 | French/English | 40/60 |
| | General science 25 | 1 | 33 | French English | 75/25 |
| | Biology 65 | 1 | 29 | French/English | 40/60 |
| | Social studies 25 | 1 | 35 | French/English | 90/10 |
| | American studies 65 | 1 | 35 | French/English | 90/10 |
| JACKSON | Social studies | 1 | 20 | French/English | 50/50 |

## V. NON-INSTRUCTIONAL COMPONENT

### CAREER ORIENTATION

Project ECO's leading goal was to build marketable skills through pre-occupational training and career education, with an emphasis on business, health, or law-related careers. The proposal anticipated systematic exploration of bilingual careers, with assistance from individuals successful in their careers who would serve as volunteer "mentors," encouraging students to acquire practical skills, to graduate, and to go on to college.

During the initial year of funding, emphasis on the recruitment of staff and phasing in of the program precluded achieving the project's goals in this area. The task of career education was primarily in the hands of the school's tax-levy staff.

At Andrew Jackson, there was limited success in achieving this goal. In the spring semester of 1980-81, students visited hospitals to identify the various careers and opportunities available to them. The curriculum specialist arranged these visits.

At Kennedy and Tilden, students were exposed to career opportunities in content-area course work and also visited various career-oriented sites in the city.

### SUPPORTIVE SERVICES

Students in Project ECO received individual and group guidance through each school's tax-levy guidance staff. Jackson and Tilden had guidance counselors and deans who were bilingual in English and French. Kennedy had guidance counselors and deans who were bilingual in English and Spanish.

Contact with the guidance counselor typically focused on placement, programming, career or vocational planning, or related problems. A school psychologist and social worker were available to identify students with special needs.

The services of a grade advisor, funded by Title VII, were available to Tilden students, and a family assistant was provided to work with students at each site. The family assistant kept in close touch with students and their parents, as did the social worker.

## STAFF DEVELOPMENT

Staff development was coordinated from the central office, and was implemented by the project director and assistant director. The project director supervised some 25 staff development activities, including meetings, workshops, and "mini-workshops" with principals, assistant principals, and staff members. Meetings were held either in groups or on an individual basis. Objectives of these activities included: general orientation; clarification of job responsibilities; programmatic scheduling; student placement; parental involvement activities; administrative procedures; curriculum development; and evaluation procedures.

Staff members attended courses at various universities, including City College, Long Island University, and Fordham University. Educational aides were expected to complete the college courses in which they were enrolled: college credit was also earned by student teaching.

## STAFF CHARACTERISTICS

Table 11 outlines the characteristics of staff members funded by Title VII.

Table 11. Staff characteristics.

| Function(s) | % Time Spent in Function | Date Hired | Education | License | Years of Monolingual Experience | Years of Bilingual Experience |
|---|---|---|---|---|---|---|
| Administrative<br>Supervisory | 50<br>50 | 10/79 | B.A. Sci.<br>M.A. Sci.<br>P.D. Ed. admin. | N.Y.C. Bil, Bio.- H.S.<br>Bio. - H.S.<br>N.Y.C. Chem. - H.S. | 12 Yrs. J.H.S. Sci. | 8 yrs. |
| Administrative<br>Supervisory | 50<br>50 | 11/80 | B.A. Education<br>L.L.B. Law<br>M.A. Education | N.Y.C. French - H.S.<br>N.Y.C. | None | 8 yrs. |
| Administrative<br>Curriculum develop. | 30<br>70 | 12/80 | B.A. French<br>M.A. French | N.Y.C. French - H.S.<br>N.Y.C. | None | 2 yrs. |
| Administrative<br>Student programming | 30<br>70 | 3/81 | M.A. Education<br>B.S. French | N.Y.C. French H.S.<br>N.Y.C. Common branches | None | 2 yrs. |
| Administrative<br>Curriculum develop. | 30<br>70 | 4/81 | B.A. Political Sci.<br>M.A. Education | N.Y.C.<br>N.Y.C. Spanish H.S. | 6 yrs. Spanish | 2 yrs. |
| Asst. classroom teacher<br>Administrative | 90<br>10 | 2/80 | B.A. French | - | None | None |
| Asst. classroom teacher<br>Administrative | 90<br>10 | 2/80 | B.A. French | - | None | None |
| Administrative<br>Family supportive services | 10<br>90 | 3/81 | H.S. Diploma | - | None | 4 yrs. |
| Administrative<br>Family supportive services | 10<br>90 | 10/79 | B.A. French | - | None | 4 yrs. |
| Administrative<br>Family supportive services | 10<br>90 | 10/80 | H.S. Diploma | - | None | 2 yrs. |

CURRICULUM DEVELOPMENT

Curriculum development was undertaken by a curriculum specialist who prepared Spanish-language materials at Kennedy, and by a curriculum specialist at Jackson. Curriculum materials developed at Jackson were to be shared with the program at Tilden.

In accordance with the second-year objectives outlined in the project proposal, Title VII staff developed curricula in the following areas:

Applied E.S.L.: Transition (Grade 9)
Level I (Grade 10)
Level II (Grade 11)

Native Language Arts and Literature (French/Creole)

Mathematics (French/Creole)

Science (French/Creole)

Caribbean Literature (French/Creole)

Geography (French/Creole)

Science Careers (Spanish)

Social Studies (Spanish)

Health (Spanish)

Despite the fact that these materials were developed for use by program teachers, the department heads and bilingual staff at Jackson and Tilden high schools did not make use of them. The lessons observed by the evaluator were based on teacher-made materials or, in some Spanish bilingual classes, commercial texts. While the staff at Kennedy were able to acquire commercially published materials in Spanish, few commercial texts appropriate to Haitian students are available.

PARENTAL INVOLVEMENT

Monthly parent meetings were scheduled at the three schools. Staff members reported that attendance was generally high at these gatherings. In addition, publication of a newsletter toward the end of each term kept parents informed of program activities.

The family assistant was primarily responsible for maintaining contact with parents and community members. At the sites where the program worked with French/Creole-dominant students, parents did not come frequently to school. This stemmed in part from assumptions by Haitian parents, founded by their experience in the native country, that school administrators and staff members have complete responsibility for and authority over students' school experience. The fact that many parents held more than one job, and lacked the time and money needed to commute to the school, also discouraged such visits.

The parent training component was in effect for both years of the program, and is offered to any parents of the target population. Parents were given E.S.L. lessons and were assisted in working toward the high school equivalency diploma. They were also offered information on job development, social security benefits, and other practical matters. Instruction was provided by licensed E.S.L. teachers, and took place in churches or community centers two or three times each week.

AFFECTIVE DOMAIN

At John F. Kennedy, students' attitude and overall academic achievement suggested a positive attitude toward the program. Even after mainstreaming, students maintained contact with program teachers and students.

Of the top fifty 1981 graduates, ten came from the bilingual project. Of 775 graduating students, 45 were program students.

Ten of the 12 seniors in the bilingual program at Jackson graduated in 1981. Of non-English dominant students, 90 percent entered college, and 80 percent of those remained enrolled; this compares with 88 percent of English-dominant students who entered college, with 82 percent of those remaining. The fact that the school has a core of mainstream students who act as peer college advisors, and who train bilingual peer advisors to provide this service to program students, may help to account for these figures.

At Tilden High School, students were generally less enthusiastic about the program than at the other sites. They apparently have felt discriminated against, and segregated from other students. They considered bilingual services to be remedial, designed for slow learners. Consequently, some have wanted to leave the program; others have acted out in other ways, becoming discipline problems, or have requested early exit from the program. Nevertheless, after a year in the program 95 percent of the students passed the French Regents, and most are successful in mastering English courses. In 1979-80, three of the top four graduating students were from the program.

Project ECO worked with the Haitian Club at Tilden and a bilingual club at Kennedy in order to plan extracurricular activities and schedule speakers. ECO staff members established a similar club at Jackson. Club activities included trips, guest speakers, and cultural events. Visits were organized to the Statue of Liberty, the Circle Line, Philadelphia, Radio

City, the United Nations, the "New York Experience." The staff at Jackson was particularly active in planning such activities.

An examination of the post-high school plans of the twelfth-grade program students reveals the following.

Table 12. Post-high school plans of twelfth-grade students.

| PLANS | N | % |
|---|---|---|
| College | 22 | 64 |
| Vocational or Career Training School | 5 | 15 |
| Job | 3 | 9 |
| Undecided | 1 | 3 |
| Unknown | 3 | 9 |
| Total | 34 | 100 |

- The majority of program students plan to attend college after graduation (64 percent).
- The next highest percentage of program students plans to seek additional vocational or career training.

## VI. FINDINGS

### ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, and science.

The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III) used by Andrew Jackson H.S. and John F. Kennedy H.S.

English as a second language performance -- Teacher-made tests used by Samuel J. Tilden H.S.

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Student attitude towards cultural heritage -- Program-developed scale

Student attitude towards education -- Program-developed scale

Staff awareness of students' problems and needs -- Program-developed scale

Attendance -- School and program records

The following analyses were performed:

The instrument used to measure growth in English language at Andrew Jackson and John F. Kennedy High Schools was the Criterion Referenced English

Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment. Performance breakdowns are reported in two ways. First, a grade and level breakdown is reported for students who were pre- and post-tested with the same test level. Second, results for the combined sample are reported for the average number of objectives mastered per month of treatment.

The results of the criterion referenced tests in mathematics, social studies, science, native language arts, and English as a second language (for Samuel J. Tilden High School) are reported in terms of the number and percent of students achieving the criterion levels set for the participants (80 percent passing).

The results of program-developed scales for student attitudes towards cultural heritage and evaluation are reported in terms of the number and percent of students whose attitudes improved.

The results of the program-developed scale for staff awareness of pupil problems and needs are reported in terms of the number and percent of staff whose attitude improved and the average improvement.

Information is provided on the attendance rate of students participating in the bilingual program compared with that of the total school population.

The following pages present achievement in tabular form.

Table 13. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, fall)

| Grade | # of Students | Average Number of Objectives Mastered PRE | POST | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
|---|---|---|---|---|---|---|
| 9 | 10 | 8.3 | 14.6 | 6.3 | 2.69 | 2.34 |
| 10 | 28 | 9.0 | 13.1 | 4.1 | 2.89 | 1.42 |
| 11 | 41 | 8.4 | 12.2 | 3.8 | 2.92 | 1.30 |
| 12 | | | | | | |
| TOTALS | 79 | 8.6 | 12.8 | 4.2 | 2.88 | 1.46 |

* Post-test minus pre-test.

.Students mastered an average of 4.2 objectives during the testing interval in the fall, or 1.46 objectives per month.

Table 14. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, fall)

| | LEVEL I | | | | LEVEL II | | | | LEVEL III | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | |
| Grade | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* |
| 9 | 6 | 9.5 | 17.0 | 7.5 | 1 | 15.0 | 21.0 | 6.0 | 3 | 3.7 | 7.7 | 4.0 |
| 10 | 8 | 7.7 | 12.4 | 4.7 | 10 | 9.4 | 15.3 | 5.9 | 10 | 9.6 | 11.5 | 1.9 |
| 11 | 10 | 11.5 | 16.1 | 4.6 | 10 | 5.7 | 10.4 | 4.7 | 21 | 8.2 | 11.3 | 3.1 |
| 12 | | | | | | | | | | | | |
| TOTAL | 24 | 9.7 | 15.1 | 5.4 | 21 | 7.9 | 13.2 | 5.3 | 34 | 8.2 | 11.0 | 2.8 |

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

- Student gains at Levels I and II were about equal, but since Level I had higher pre-test scores, their gain is proportionately better.
- Students in Level III had smaller gains, however, their pre-test score of 8.2 (out of 15) resulted in less room for gain. Their gain was therefore proportionately better than gains at the other levels.
- Most ninth graders were at Level I while most eleventh graders were at Level III, and tenth graders were about evenly distributed among levels.
- The gains for the eleventh grade appear to be the smallest due to the majority of eleventh graders being at Level III which has only 15 objectives.
- The gains for the tenth grade were depressed due to the fact that one third of the students were tested at Level III. In addition, their pre-test scores were very high, restricting the opportunity to demonstrate growth.
- The gains for the ninth grade were highest due to their being tested primarily at Level I. In addition the students at Level III pre-tested much lower than tenth and eleventh graders, therefore allowing more room for gain.

Table 15. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, spring)

| Grade | # of Students | Average Number of Objectives Mastered Pre | Post | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
|---|---|---|---|---|---|---|
| 9 | 18 | 9.2 | 13.8 | 4.6 | 2.93 | 1.53 |
| 10 | 30 | 9.5 | 13.7 | 4.2 | 2.95 | 1.42 |
| 11 | 37 | 9.9 | 13.7 | 3.8 | 2.93 | 1.30 |
| 12 | | | | | | |
| TOTAL | 85 | 9.6 | 13.7 | 4.1 | 2.94 | 1.39 |

*Post-test minus pre-test.

.Students mastered an average of 4.1 objectives during the testing interval in the spring, or 1.39 objectives per month.

.There was an increase in the total number of students due primarily to an increase in the number of ninth graders.

Table 16. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students at John F. Kennedy High School, spring)

| | LEVEL I | | | | LEVEL II | | | | LEVEL III | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | |
| Grade | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* |
| 9 | 10 | 8.3 | 12.7 | 4.4 | 5 | 11.0 | 17.8 | 6.8 | 3 | 9.0 | 10.7 | 1.7 |
| 10 | 7 | 6.9 | 14.4 | 7.5 | 12 | 10.8 | 15.1 | 4.3 | 11 | 9.7 | 11.8 | 2.1 |
| 11 | 4 | 7.7 | 14.5 | 6.8 | 16 | 9.7 | 14.7 | 5.0 | 17 | 10.6 | 12.5 | 1.9 |
| 12 | | | | | | | | | | | | |
| TOTAL | 21 | 7.7 | 13.6 | 5.9 | 33 | 10.3 | 15.3 | 5.0 | 31 | 10.2 | 12.1 | 1.9 |

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

.Both pre- and post-test scores were higher than the fall scores for Levels II and III.

.Both pre- and post-test scores increase with level.

.Gains for Level III are small due to a ceiling effect caused by the very high pre-test score.

.The proportion of students for grade 9 is highest at Level I, for grade 10, highest at Level II, and for grade 11, highest at Level III.

.Since the proportions show a grade by level interaction, and the higher levels show further gains due to ceiling effects, the result is that the higher grades show fewer gains.

Table 17. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, fall)

| Grade | # of Students | Average Number of Objectives Mastered Pre | Post | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
|---|---|---|---|---|---|---|
| 9 | | | | | | |
| 10 | 2 | 8.5 | 19.0 | 10.5 | 2.98 | 3.52 |
| 11 | 5 | 14.0 | 17.8 | 3.8 | 2.86 | 1.33 |
| 12 | 21 | 11.7 | 14.8 | 3.1 | 2.85 | 1.09 |
| TOTAL | 28 | 11.9 | 15.6 | 3.7 | 2.86 | 1.29 |

*Post-test minus pre-test.

. Students mastered an average of 3.7 objectives during the testing interval in the fall, or 1.29 objectives per month.

Table 18. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, fall)

| | LEVEL I | | | | LEVEL II | | | | LEVEL III | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | | | Average Number of Objectives Mastered | | |
| Grade | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* |
| 9 | | | | | | | | | | | | |
| 10 | 1 | 10.0 | 14.0 | 4.0 | 1 | 7.0 | 24.0 | 17.0 | | | | |
| 11 | 3 | 14.7 | 19.0 | 4.3 | 1 | 13.0 | 17.0 | 4.0 | 1 | 13.0 | 15.0 | 2.0 |
| 12 | 1 | 17.0 | 20.0 | 3.0 | 6 | 14.5 | 21.0 | 6.5 | 14 | 10.1 | 11.7 | 1.6 |
| TOTAL | 5 | 14.2 | 18.2 | 4.0 | 8 | 13.4 | 20.9 | 7.5 | 15 | 10.3 | 11.9 | 1.6 |

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

.Students mastered most of the objectives at each level on the post-test.

.Most twelfth graders were tested at Level III, and because they had a high pre-test score (10.1 out of 15) there was little room for growth due to the ceiling effect. This made the twelfth grade appear to be doing poorly when compared to the tenth grade.

Table 19. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I French/Creole-speaking students at Andrew Jackson High School, spring)

| Grade | # of Students | Average Number of Objectives Mastered Pre | Post | Objectives Mastered* | Average Months of Treatment | Objectives Mastered Per Month |
|---|---|---|---|---|---|---|
| 9 | 2 | 8.5 | 19.0 | 10.5 | 2.98 | 3.52 |
| 10 | 3 | 13.0 | 18.3 | 5.3 | 3.07 | 1.73 |
| 11 | 4 | 11.7 | 16.5 | 4.8 | 2.38 | 2.02 |
| 12 | 6 | 14.7 | 18.2 | 3.5 | 3.07 | 1.14 |
| TOTAL | 15 | 12.7 | 17.9 | 5.2 | 2.87 | 1.81 |

*Post-test minus pre-test.

- Students mastered an average of 5.2 objectives during the testing interval, or 1.81 objectives per month.
- Because of the small number of students at each grade, there is great fluctuation in objectives mastered and objectives mastered per month.

Table 20. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students at Andrew Jackson High School, spring)

| | LEVEL I | | | | LEVEL II | | | | LEVEL III | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average number of Objectives Mastered | | | | Average number of Objectives Mastered | | | | Average number of Objectives Mastered | | |
| Grade | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* | N | PRE | POST | GAIN* |
| 9 | 2 | 8.5 | 19.0 | 10.5 | | | | | | | | |
| 10 | 1 | 10.0 | 19.0 | 9.0 | 2 | 14.5 | 18.0 | 3.5 | | | | |
| 11 | 1 | 10.0 | 17.0 | 7.0 | 2 | 12.5 | 17.5 | 5.0 | 1 | 12.0 | 14.0 | 2.0 |
| 12 | 1 | 19.0 | 24.0 | 5.0 | 3 | 18.7 | 20.7 | 2.0 | 2 | 6.5 | 11.5 | 5.0 |
| TOTAL | 5 | 11.2 | 19.6 | 8.4 | 7 | 15.7 | 19.0 | 3.3 | 3 | 8.3 | 12.3 | 4.0 |

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

- The students are fairly well distributed by grade and level. There is a tendency to have more students in the higher levels at the higher grades.
- There is great fluctuation all around due to the small numbers involved, making comparisons inappropriate.

Table 21. Number and percent of French/Creole-speaking students passing teacher-made examinations in English as a second language at Samuel J. Tilden High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 5 | 5 | 100% | 5 | 5 | 100% |
| 10 | 24 | 21 | 87% | 34 | 30 | 80% |
| 11 | 32 | 27 | 84% | 36 | 34 | 94% |
| 12 | 3 | 3 | 100% | 3 | 3 | 100% |
| TOTAL | 64 | 56 | 87% | 78 | 72 | 92% |

NOTE: This information was supplied in lieu of CREST (Criterion Referenced English Syntax Test) data.

- The criterion objective of 80 percent passing was surpassed both semesters.
- The overall performance improved from the fall to the spring.

Table 22. Number and percent of Spanish-speaking students passing teacher-made examinations in mathematics at John F. Kennedy High School.

| Grade | FALL 1980 N | FALL 1980 Number Passing | FALL 1980 Percent Passing | SPRING 1981 N | SPRING 1981 Number Passing | SPRING 1981 Percent Passing |
|---|---|---|---|---|---|---|
| 9 | | | | 23 | 16 | 70% |
| 10 | 34 | 34 | 100% | 35 | 25 | 71% |
| 11 | 45 | 40 | 89% | 45 | 36 | 80% |
| 12 | | | | | | |
| TOTAL | 79 | 74 | 94% | 103 | 77 | 75% |

- The criterion objective of 80 percent passing was surpassed in the fall but not attained in the spring.
- The combined passing percentage for the year was 83 percent, thus meeting the criterion objective.
- The overall performance was better during the fall.

Table 23. Number and percent of French/Creole-speaking students passing teacher-made examinations in mathematics at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 1 | 1 | 100% | 4 | 3 | 75% |
| 10 | 14 | 9 | 64% | 15 | 12 | 80% |
| 11 | 9 | 8 | 89% | 9 | 8 | 89% |
| 12 | 39 | 32 | 82% | 21 | 16 | 76% |
| TOTAL | 63 | 50 | 79% | 49 | 39 | 80% |

- The criterion objective of 80 percent passing was met in the spring and barely missed in the fall.
- The overall performance was consistent both semesters although there was some fluctuation by grade.

Table 24. Number and percent of French/Creole students passing teacher-made examinations in mathematics at Samuel J. Tilden High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 4 | 3 | 75% | 5 | 5 | 100% |
| 10 | 20 | 15 | 75% | 33 | 25 | 76% |
| 11 | 32 | 27 | 84% | 36 | 34 | 94% |
| 12 | 3 | 3 | 100% | 3 | 3 | 100% |
| TOTAL | 59 | 48 | 81% | 77 | 67 | 87% |

- The criterion objective of 80 percent passing was surpassed both semesters.
- The overall performance improved from the fall to the spring.

Table 25. Number and percent of Spanish-speaking students passing teacher-made examinations in science at John F. Kennedy High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 23 | 22 | 96% | 23 | 18 | 78% |
| 10 | 35 | 34 | 97% | 34 | 31 | 91% |
| 11 | 44 | 39 | 89% | 44 | 36 | 82% |
| 12 | | | | | | |
| TOTAL | 102 | 95 | 93% | 101 | 85 | 84% |

- The criterion objective of 80 percent passing was surpassed both semesters.
- Performance was better in the fall for all grade levels.

Table 26. Number and percent of French/Creole-speaking students passing teacher-made examinations in science at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 1 | 1 | 100% | 4 | 1 | 25% |
| 10 | 11 | 6 | 54% | 15 | 10 | 67% |
| 11 | 8 | 6 | 75% | 8 | 6 | 75% |
| 12 | 36 | 31 | 86% | 20 | 17 | 85% |
| TOTAL | 56 | 44 | 79% | 47 | 34 | 72% |

- The criterion objective of 80 percent passing was not met either semester except by twelfth graders.
- The overall performance was better during the fall semester.

Table 27. Number and percent of French/Creole-speaking students passing teacher-made examinations in science at Samuel J. Tilden High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 4 | 3 | 75% | 5 | 5 | 100% |
| 10 | 20 | 15 | 75% | 33 | 27 | 82% |
| 11 | 33 | 24 | 73% | 36 | 34 | 94% |
| 12 | 3 | 3 | 100% | 3 | 3 | 100% |
| TOTAL | 60 | 45 | 75% | 77 | 69 | 90% |

- The criterion objective of 80 percent passing was surpassed in the spring but not met in the fall.
- The combined passing percentage for the year was 83 percent thus meeting the criterion objective.
- The overall performance improved from fall to spring.

Table 28. Number and percent of Spanish-speaking students passing teacher-made examinations in social studies at John F. Kennedy High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 23 | 20 | 87% | 23 | 17 | 74% |
| 10 | 35 | 33 | 94% | 35 | 28 | 80% |
| 11 | 45 | 41 | 91% | 45 | 39 | 87% |
| 12 | | | | | | |
| TOTAL | 103 | 94 | 91% | 103 | 84 | 82% |

.The criterion objective of 80 percent passing was surpassed both semesters.

.Performance was better during the fall for all grade levels.

Table 29. Number and percent of French/Creole-speaking students passing teacher-made examinations in social studies at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 1 | 1 | 100% | 4 | 4 | 100% |
| 10 | 13 | 8 | 62% | 16 | 10 | 62% |
| 11 | 8 | 8 | 100% | 9 | 7 | 78% |
| 12 | 39 | 36 | 92% | 21 | 17 | 81% |
| TOTAL | 61 | 53 | 87% | 50 | 38 | 76% |

- The criterion objective of 80 percent passing was surpassed in the fall but not attained in the spring.
- The combined passing percentage for the entire year was 82 percent, thus meeting the criterion objective.
- The overall performance was better in the fall.

Table 30. Number and percent of French/Creole-speaking students passing teacher-made examinations in social studies at Samuel J. Tilden High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 4 | 4 | 100% | 5 | 5 | 100% |
| 10 | 20 | 14 | 70% | 33 | 26 | 79% |
| 11 | 32 | 26 | 81% | 36 | 32 | 89% |
| 12 | 3 | 3 | 100% | 3 | 3 | 100% |
| TOTAL | 59 | 47 | 80% | 77 | 66 | 86% |

- The criterion objective of 80 percent passing was met both semesters.
- The overall performance improved from the fall to the spring semester.

Table 31. Number and percent of Spanish-speaking students passing teacher-made examinations in native language arts at John F. Kennedy High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 23 | 19 | 83% | 22 | 13 | 59% |
| 10 | 35 | 34 | 97% | 34 | 30 | 88% |
| 11 | 45 | 43 | 96% | 45 | 39 | 87% |
| 12 | | | | | | |
| TOTAL | 103 | 96 | 93% | 101 | 82 | 80% |

- The criterion objective of 80 percent passing was met both semesters.
- Performance during the fall was better at each grade level.

Table 32. Number and percent of French/Creole-speaking students passing teacher-made examinations in native language arts at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 1 | 1 | 100% | 3 | 3 | 100% |
| 10 | 11 | 9 | 82% | 11 | 10 | 91% |
| 11 | 6 | 6 | 100% | 5 | 5 | 100% |
| 12 | 36 | 34 | 94% | 18 | 17 | 94% |
| TOTAL | 54 | 50 | 93% | 37 | 35 | 95% |

- The criterion objective of 80 percent passing was surpassed both semesters.
- The overall performance improved from the fall to the spring.

Table 33. Number and percent of French/Creole-speaking students passing teacher-made examinations in native language arts at Samuel J. Tilden High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | 4 | 4 | 100% | 5 | 5 | 100% |
| 10 | 21 | 16 | 76% | 33 | 29 | 88% |
| 11 | 33 | 26 | 79% | 36 | 34 | 94% |
| 12 | 3 | 3 | 100% | 3 | 3 | 100% |
| TOTAL | 61 | 49 | 80% | 77 | 71 | 92% |

- The criterion objective of 80 percent passing was met both semesters.
- The overall performance improved from the fall to the spring.

Table 34. Number and percent of Spanish-speaking students improving on the program-developed scale of attitude towards cultural heritage at John F. Kennedy High School.

| | | SPRING 1981 | |
|---|---|---|---|
| Grade | N | Number Passing | Percent Passing |
| 9 | 23 | 23 | 100% |
| 10 | 35 | 35 | 100% |
| 11 | 45 | 45 | 100% |
| 12 | | | |
| TOTAL | 103 | 103 | 100% |

.The criterion objective of the students improving their attitude towards cultural heritage was surpassed.

Table 35. Number and percent of French/Creole-speaking students improving on program-developed scale of attitude towards cultural heritage at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Improving | Percent Improving | N | Number Improving | Percent Improving |
| 9 | | | | 4 | 4 | 100% |
| 10 | 3 | 3 | 100% | 16 | 14 | 87% |
| 11 | 3 | 2 | 67% | 8 | 7 | 87% |
| 12 | 3 | 3 | 100% | 21 | 20 | 95% |
| TOTAL | 9 | 8 | 89% | 49 | 45 | 92% |

- The criterion objective of 80 percent of students was improving their attitude towards cultural heritage was surpassed both semesters.
- Overall the student attitude improved from the fall to the spring despite minor fluctuations.

Table 36. Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards cultural heritage at Samuel J. Tilden High School.

| | | SPRING 1981 | |
|---|---|---|---|
| Grade | N | Number Passing | Percent Passing |
| 9 | 7 | 5 | 71% |
| 10 | 35 | 28 | 80% |
| 11 | 35 | 32 | 91% |
| 12 | | | |
| TOTAL | 77 | 65 | 84% |

.The criterion objective of 80 percent of the students improving their attitude towards cultural heritage was met.

Table 37. Number and percent of Spanish-speaking students improving on the program-developed scale of attitude towards education at John F. Kennedy High School.

| | | SPRING 1981 | |
|---|---|---|---|
| Grade | N | Number Passing | Percent Passing |
| 9 | 20 | 20 | 100% |
| 10 | 35 | 35 | 100% |
| 11 | 45 | 45 | 100% |
| 12 | | | |
| TOTAL | 100 | 100 | 100% |

.The criterion objective of 80 percent of the students improving their attitude towards school was surpassed.

Table 38. Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards education at Andrew Jackson High School.

| | FALL 1980 | | | SPRING 1981 | | |
|---|---|---|---|---|---|---|
| Grade | N | Number Passing | Percent Passing | N | Number Passing | Percent Passing |
| 9 | | | | 4 | 4 | 100% |
| 10 | 3 | 3 | 100% | 16 | 14 | 87% |
| 11 | 2 | 1 | 50% | 9 | 9 | 100% |
| 12 | 2 | 2 | 100% | 20 | 19 | 95% |
| TOTAL | 7 | 6 | 86% | 49 | 46 | 94% |

.The criterion objective of 80 percent of the students improving their attitude toward school was surpassed both semesters.

.Overall, student attitude improved from the fall to the spring.

Table 39. Number and percent of French/Creole-speaking students improving on the program-developed scale of attitude towards education at Samuel J. Tilden High School.

| Grade | N | SPRING 1981 Number Passing | Percent Passing |
|---|---|---|---|
| 9 | 7 | 6 | 86% |
| 10 | 35 | 33 | 94% |
| 11 | 35 | 31 | 89% |
| 12 | 1 | 1 | 100% |
| TOTAL | 78 | 71 | 91% |

.The criterion objective of 80 percent of the students improving their attitude towards school was surpassed.

Table 40. Staff awareness of students' problems and needs.

Average difference between initial and final ratings of student behaviors

| School | Number of Staff | Number Increasing at Least One point | Percent Increasing at Least One point | Average Difference Final-Initial |
|---|---|---|---|---|
| Andrew Jackson H.S. | 8 | 8 | 100% | +9.25 |
| Samuel J. Tilden H.S. | 6 | 4 | 67% | +3.50 |
| John F. Kennedy H.S. | 17 | 10 | 59% | +1.71 |
| Total | 31 | 22 | 71% | +4.00 |

- Staff members at all three schools showed on average gain in the incidence of positive behaviors at the end of the year.
- The average differences varied from 1.71 at John F. Kennedy H.S. to 9.25 at Andrew Jackson H.S. with an overall mean of 4.0 for all teachers.
- The criterion of 80 percent of staff improving at least one point was achieved only at Andrew Jackson H.S. and was not met by the combined family for all three schools.

Table 41. Significance of the difference between attendance percentages of program students at John F. Kennedy High School and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 76.83

| Grade | N | Mean Percentage | Standard Deviation | Percentage Difference | t | p |
|---|---|---|---|---|---|---|
| 9 | 23 | 85.13 | 21.97 | 8.30 | 1.81 | .05 |
| 10 | 35 | 91.85 | 10.32 | 15.02 | 8.61 | .001 |
| 11 | 45 | 93.49 | 7.41 | 16.83 | 15.08 | .001 |
| TOTAL | 103 | 91.07 | 13.20 | 14.24 | 10.95 | .001 |

- Attendance for all grades was significantly higher than the school-wide attendance.
- The total program attendance difference (14.24) met the criterion difference of 10-15 percent.

Table 42. Significance of the difference between attendance percentages of program students at Andrew Jackson High School and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 67.58

| Grade | N | Mean Percentage | Standard Deviation | Percentage Difference | t | p |
|---|---|---|---|---|---|---|
| 9 | 1 | 96.00 | - | 28.42 | - | - |
| 10 | 13 | 88.69 | 15.63 | 21.11 | 4.87 | .001 |
| 11 | 9 | 88.56 | 5.79 | 20.98 | 10.87 | .001 |
| 12 | 21 | 90.71 | 8.34 | 23.13 | 12.71 | .001 |
| TOTAL | 44 | 89.80 | 10.43 | 22.22 | 14.13 | .001 |

.Attendance was significantly higher than school-wide attendance for all grades except grade 9 where only one student was reported and a t test could not be done.

.The total program attendance difference (22.22) exceeded the criterion difference of 10-15 percent.

Table 43. Significance of the difference between attendance percentages of program students at Samuel J. Tilden High School and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 82.99

| Grade | N | Mean Percentage | Standard Deviation | Percentage Difference | t | p |
|---|---|---|---|---|---|---|
| 9 | 6 | 87.83 | 16.35 | 4.84 | 0.73 | 9.5 |
| 10 | 25 | 90.04 | 12.32 | 7.05 | 2.86 | .005 |
| 11 | 33 | 95.12 | 5.73 | 12.13 | 12.16 | .001 |
| 12 | 3 | 99.00 | 1.00 | 16.01 | 27.73 | .001 |
| TOTAL | 68 | 92.82 | 10.00 | 9.83 | 8.11 | .001 |

- Attendance was significantly higher than school-wide attendance for all grades except grade 9.
- Grade 9 differences were not significant due to a small number of pupils (6) of whom one had low attendance during the spring and one had low attendance during the fall.
- The total program attendance difference (9.83) barely missed the criterion level of 10-15 percent.
- The total program attendance (92.82) was the highest of the three schools.

## VII. CONCLUSIONS AND RECOMMENDATIONS

The program appeared to be functioning well, as evidenced by students' attitude and academic achievement.

A weak aspect of the program has been curriculum development. Materials in such courses as business, computer science, secretarial skills, career education, and accounting were supposed to be developed, according to the proposal's two- and three-year objectives, but were not. While the two curriculum specialists for Spanish and French/Creole both were engaged in generating curricula, the department heads and bilingual staff at Jackson and Tilden did not make use of new materials. It may be that they were not made aware of the existence of these materials, or could not locate them. But in view of the paucity of commercial materials suitable for Haitian students, it would behoove the staff to evaluate and use newly developed materials. This would enhance the classroom experience of the target population, and might also assist students in other Haitian bilingual programs in the city. The project staff might also consider exploring and acquiring appropriate materials generated by other programs in New York or other cities.

The fact that staff members involved with project ECO were either not aware or did not make sufficient use of these materials can be partly explained by the fact that the objectives were based on the premise that the program would be funded for three years instead of the approved two-year contract. Consequently, the third phase of the program -- training in the use of these materials and dissemination -- did not materialize.

Two major problems confronted the project at Jackson: staffing, and the size of the student population. The need for bilingual French/Creole-speaking teachers is critical, yet none has been recruited. In 1980-81, the school filled seven teacher vacancies; while both the assistant principal and coordinator stressed the need for bilingual teachers, none of the new teachers was French/Creole-speaking. It is therefore recommended that bilingual personnel fluent in French/Creole and knowledgeable in the target population's culture be recruited to service the population at Jackson and at Tilden. The principles and philosophy of bilingual education could be more strongly emphasized, especially at Tilden where all instruction was in English.

With regard to the size of the student population, the discrepancy between the number of eligible students in need of services proposed by the administration and that estimated by the program staff should be examined and discussed. If necessary, the number should be adjusted.

A questionnaire conducted among staff members found that implementation of the instructional component was hampered by the size of classes, which too often exceeded 30 or even 40 students (a math class at Tilden had a register of 43), by a lack of appropriate materials, particularly visual and audio-visual aids, and by the shortage of paraprofessional assistance. Teachers at Tilden stressed the fact that homogeneous grouping for program students is "an absolute must" for effective teaching. At Kennedy, teachers complained that the curriculum is too watered down, that N.L.A. texts were not appropriate for native speakers.

While the ultimate justification for the program which combined sites in different boroughs and which dealt with student populations from different language groupings was to offer career orientation geared to bilingual students, this component was hardly implemented. In part, this was due to the fact that a program designed for three years had to be implemented in two. In fact, the program's primary goal was not achieved.

Finally, efforts should be made to quantify more appropriately student progress. Although program students have shown good progress and achievement on teacher-made tests, as indicated by Tables 22 through 33, these examinations are neither normed nor standardized. Use of the latter type of test would assist in further estimating the performance level of program students.

CAPACITY BUILDING

Interviews with the assistant principals in charge of the bilingual programs at the three sites revealed the following information concerning capacity building.

At Kennedy, bilingual teachers were hired with tax-levy funds as well as two bilingual deans, one bilingual counselor, and one social worker. Once federal funding ceases, these individuals will continue to work with Spanish-dominant students who will receive full bilingual services.

At Andrew Jackson, no additional bilingual classroom teachers were hired when Project ECO was introduced. However, the teacher of the bilingual social studies and native language arts classes spoke fluent French. When federal funding ceases, these services will continue as needed as well as E.S.L.

At Samuel J. Tilden, no additional bilingual classroom teachers or other bilingual personnel were hired when Project ECO was introduced. However, the teachers of the bilingual social studies, native language arts, math, and science classes speak fluent French, though their knowledge of Haitian Creole is limited. When federal funding ceases, these services will continue as needed as well as E.S.L.